

Transportation Framework

Overview

Currently, the downtown study area serves as a crossroads for regional traffic. Major roadways bisect parts of downtown and isolate districts.

Projections for downtown, nearby Antelope Valley, the University of Nebraska and the region as a whole indicate that traffic through downtown will become more congested, even with only modest growth in these areas.

Additional congestion will adversely affect the livability and investment environment in downtown. The transportation framework provides alternatives for getting into and around downtown and for knitting together areas separated by heavy automobile traffic.

Providing a Balanced Transportation Network

Today, Lincoln's transportation system to downtown is heavily oriented toward the automobile. This transportation framework broadens the focus, gives the public options, and distributes automobile "trips" to other modes of transportation.

For these transportation options to attract significant numbers of users – enough transit riders or bicyclists to affect auto congestion and livability – they must:

- Be safe, convenient and comfortable to use – they must consider factors such as climate.
- Serve attractor or destination uses.
- Be perceived as "premium infrastructure" – that is, attractions in and of themselves – in order to entice drivers out of their cars.

The transportation framework incorporates and summarizes work developed by subconsultants Nelson-Nygaard Associates for transit and bicycle facilities; it does not include



information on parking structure management developed recently by Carl Walker and Associates.

Traffic Analysis

This framework is not, nor is it intended to be, a traffic analysis. The land use framework suggests considerable additional development that will require further analysis of all elements detailed within the transportation framework by the City's Public Works Department.

Key Elements

The transportation framework addresses three modes of transportation: (1) auto/truck, (2) transit, and (3) bicycle. The pedestrian mode is addressed separately, as the focus of the Public Realm Framework section of this document.

Auto Framework

The framework recognizes that motorized vehicles will be the primary modes of access into and through downtown. Proposed improvements include:

- New streets.
- Boulevard roadway improvements.
- New two-way street segments.
- Back-in angled parking streets.

Transit Framework

Short- and long-term circulation systems will provide premium service throughout downtown and be integrated into the University of Nebraska's transit system. Proposals for improvements to the transit framework include:

- Bus shuttle.
- Streetcar.
- Multi-modal center.

Bicycle Framework

Bicycle lanes will provide access to and connections within downtown.

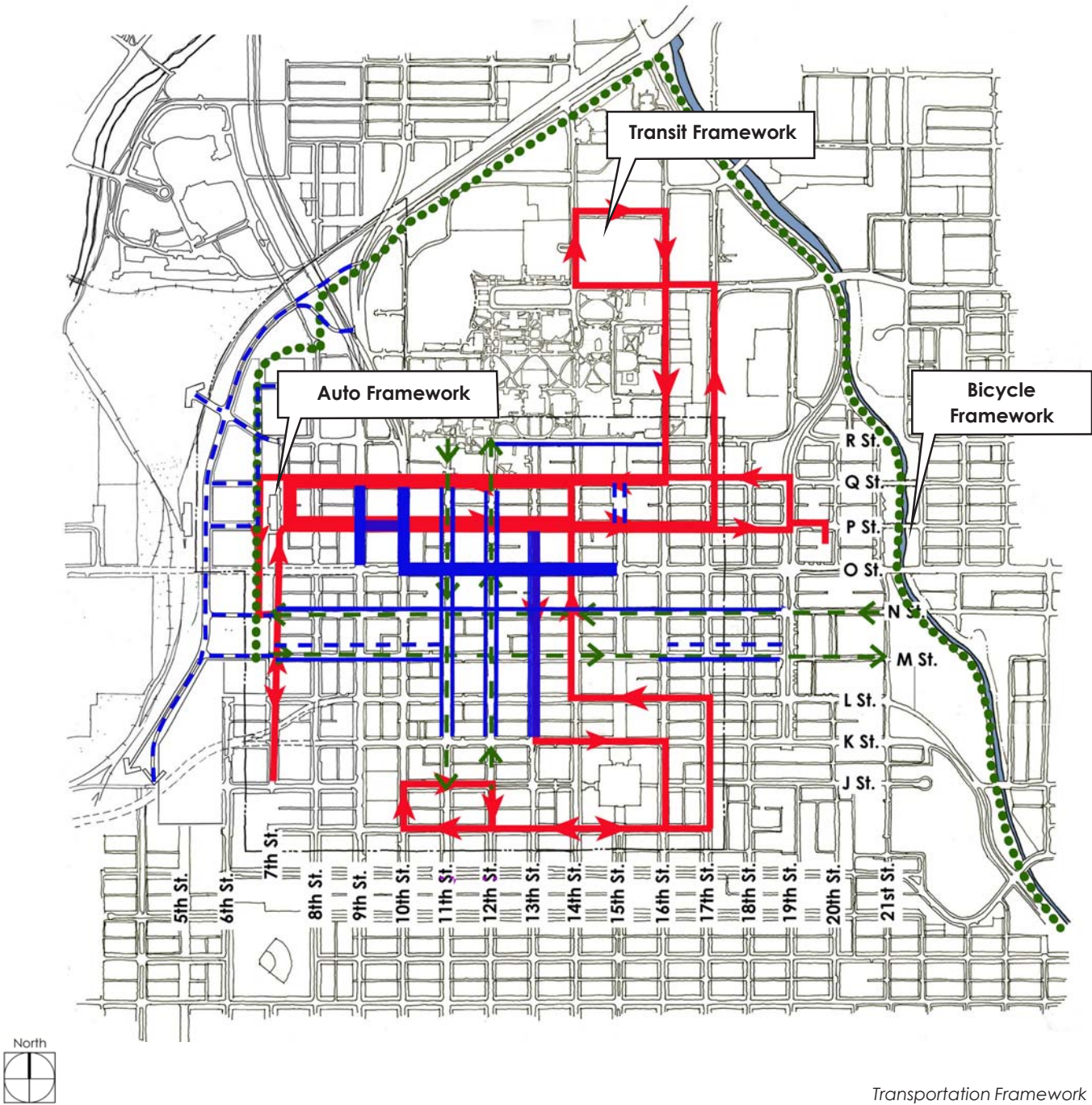
These three frameworks are diagrammed and detailed on the following pages.



P Street at 13th

KEY ELEMENTS:

- Transit Framework
- Bicycle Framework
- Auto Framework



Automobile Framework

Proposed components of the auto framework are described and identified below; each is detailed on separate pages that follow.

- **New Two-way Street Segments** – rerouting of streets to improve downtown access.
- **Back-in Angled Parking Streets** – re-striping of current head-in angle parking.
- **Boulevard Roadway Improvements** –include retail boulevard street
- **New Streets**– provide access to new and existing development while mitigating heavy traffic in existing districts.

improvements on O Street and boulevard grade-separation of portions of 9th and 10th Streets to improve traffic circulation and mitigate pedestrian/auto conflicts on P Street; improvements are within existing rights-of-way.



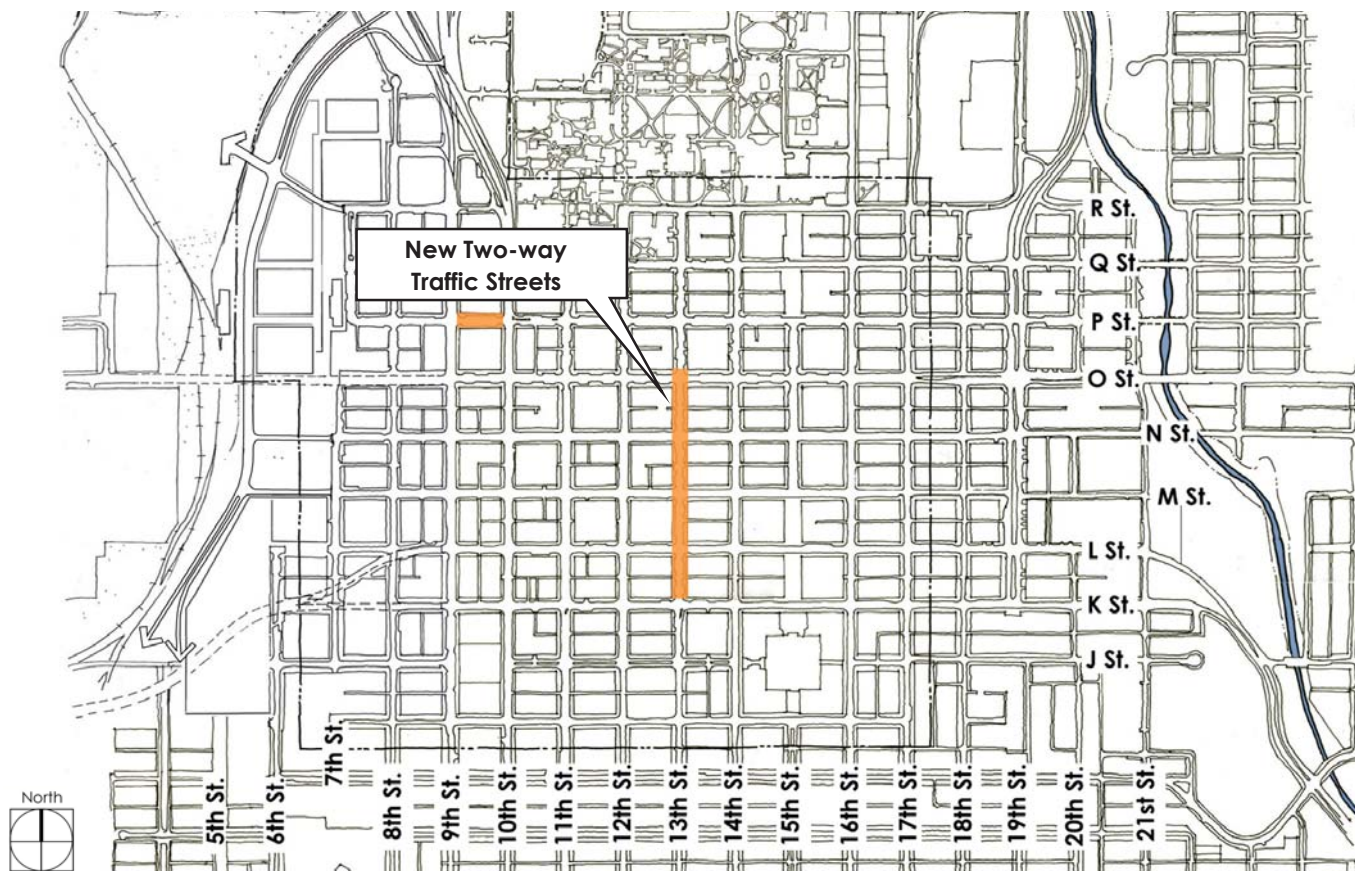
Automobile and Truck Framework

New Two-way Street Segments

Revitalization of downtown Lincoln requires a reassessment of the role traffic plays. Is it important to simply move traffic in and out of the employment center as quickly as possible? With new mixed residential, retail and entertainment uses planned for downtown, the free flow of auto traffic must be balanced with livability and economic viability issues for the desired revitalization to occur.

For years, traffic movement was evaluated by how short a delay occurred in downtown for morning and afternoon rush hour drivers. To reduce delays, many streets were converted to one-way; this reduced conflicting auto movements and increased both roadway capacity and traffic signal "green" time.

Recently, it has been recognized that these automobile-oriented operational changes have created a domino effect of disadvantages. Selected conversion of street segments from one-way to two-way has potential benefits to the revitalization of Downtown. Such conversions improve the marketability of development sites by enhancing drive-by exposure and creates a feeling among pedestrians of a more welcoming walking environment.



New Two-Way Traffic Framework

Downtown Vitality and Revitalization

One-way streets have a negative affect on storefront exposure for businesses that rely on drive-by traffic. To being with, potential exposure to through-traffic is cut by 50%, and this deleterious effect may be further exacerbated depending on the retail use.

For instance, a restaurant that is open only during evening hours accrues little benefit from drive-by exposure if peak hour traffic occurs only during morning commutes.

Conversion to two-way traffic is proposed for the following streets:

- **13th Street** - between O to K Street.
- **P Street** - between 9th and 10th streets, in conjunction with the planned grade separation of these two streets at P.

Further study should be done prior to implementation of two-way traffic on these streets. This review should consider the balance between the needs of traffic flow and the goal of long term downtown vitality and revitalization.



Existing P Street between 9th and 10th Streets – Proposed to be Two-way



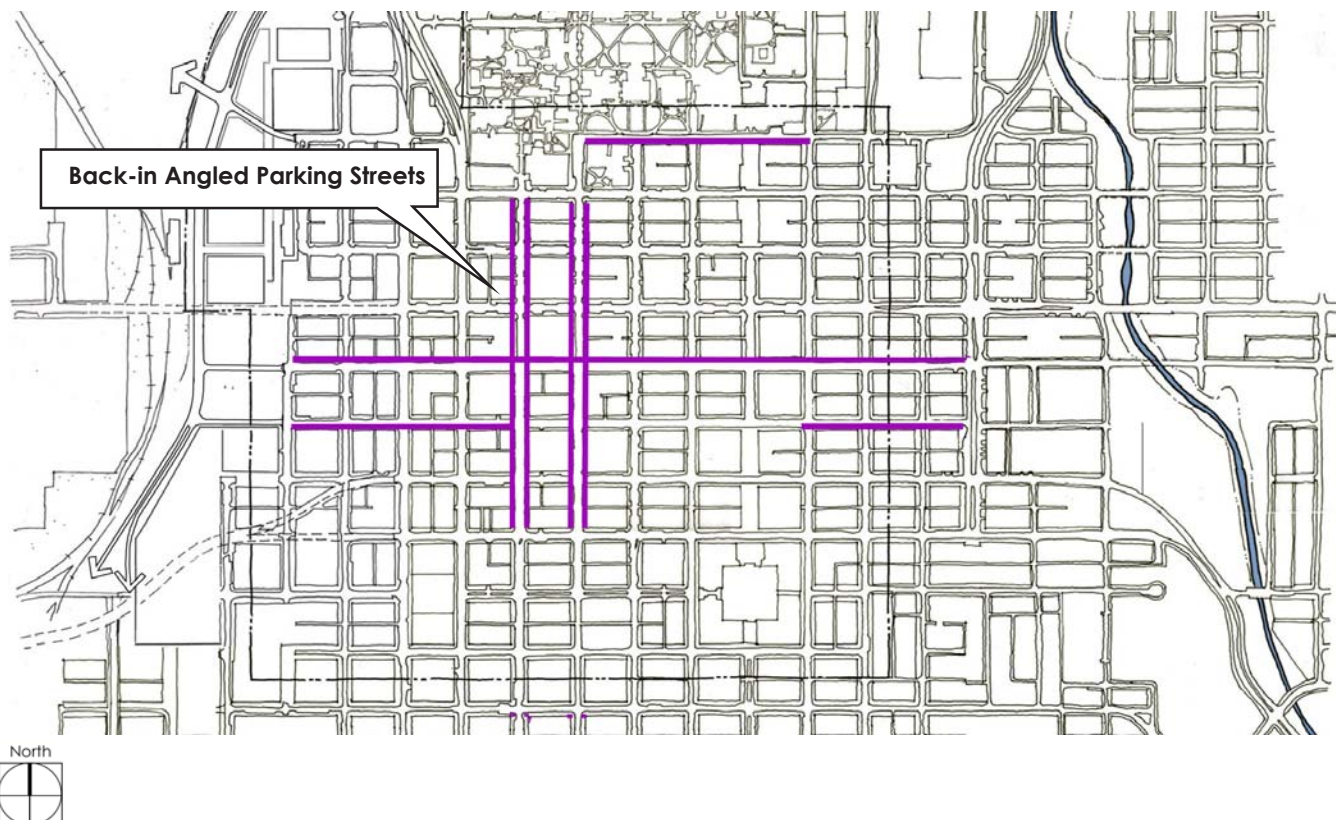
Existing 13th Street between K and O Streets – Proposed to be Two-way

Back-in Angled Parking Streets

Re-striping of existing on-street parking stalls will be considered where bicycle lanes will be provided. The re-striping would introduce the use of the “back-in angle” parking concept to the Downtown area. In contrast to the traditional “head-in angle” parking, this concept calls for drivers to back into rather than drive into the stall. This approach then allows the vehicle to be driven directly out of the parking stall when the parker leaves the on-street space.



Back-In Angled Parking



Back-in Angled Parking Streets

Boulevard Roadway Improvements

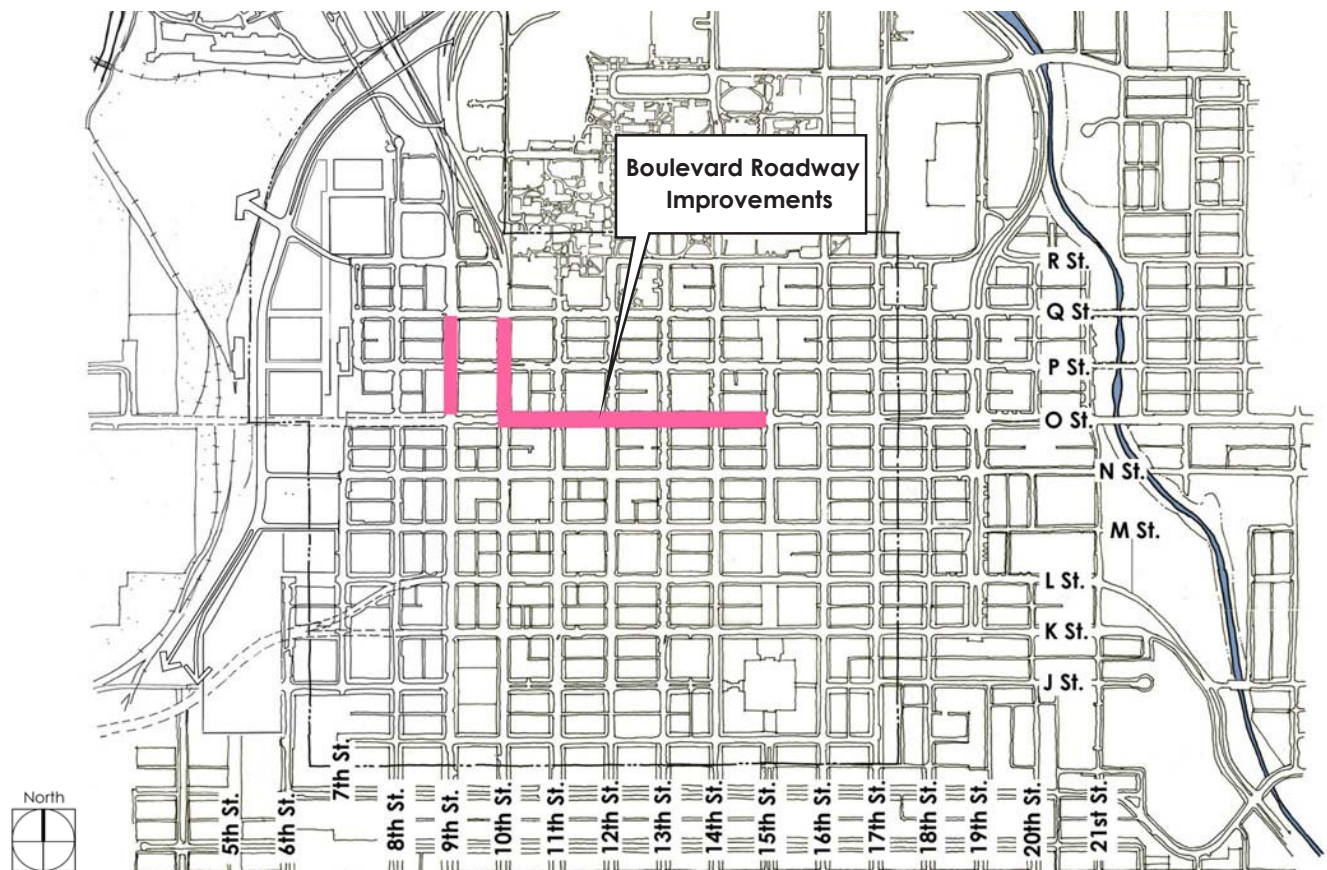
Changes to existing roadways would be made to improve the pedestrian environment on P and O streets, and the passage of auto traffic on the major thoroughfares of 9th and 10th streets. Methods include:

- **Lincoln Crossing Grade-Separated Boulevard** – at the respective intersections of both 9th and 10th streets with P Street.
- **Boulevard Street Retail** – on O Street between 10th and 15th.

These changes are further explained on the pages that follow.



Existing 10th and P Streets Intersection



Existing Roadway Improvements Diagram

O Street

Historically, O Street served as Lincoln's primary retail corridor. A number of events and conditions have led to its loss of prominence and viability as a pedestrian-oriented retail street.

The most significant condition that has impacted O Street has been heavy auto and truck traffic. Typically, the maximum number of average daily trips (ADT) that still allows a pedestrian-friendly street environment is 15,000; O Street has an average current ADT of 20,000. Thus a traditional pedestrian street-design for O Street is not achievable.

Retail Boulevard

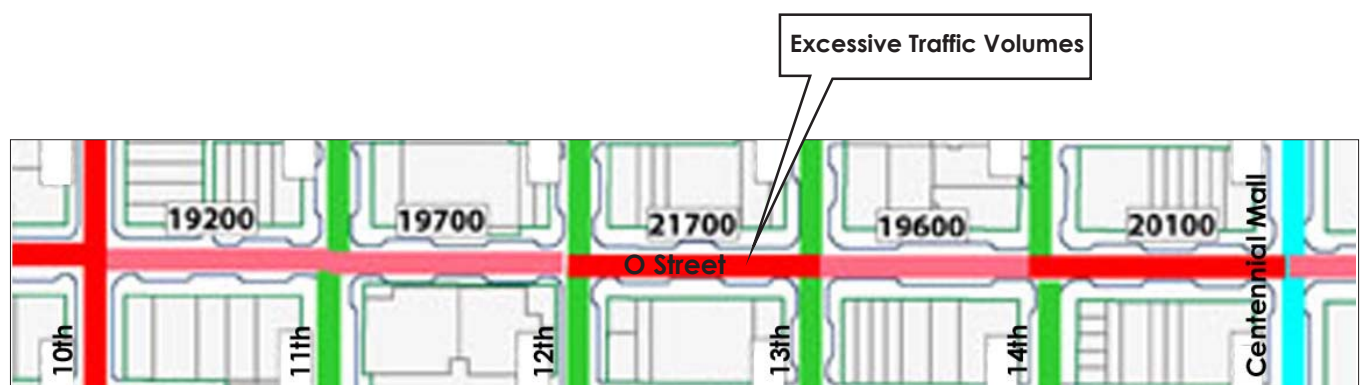
With O Street designated as a state highway and a major arterial corridor through Lincoln, its traffic will only increase over the coming years. However, improvements might be made within the existing right-of-way to mitigate the effect of auto traffic on the O Street pedestrian and retail environment. One measure will be boulevard-style "parallel access streets," described in detail on the following pages.



O Street- Streetcar Era, 1914



O Street- Traffic Today



Current O Street Traffic Volume

Parallel Access Streets

As part of a retail boulevard street design, this type of road is used extensively worldwide. It allows street-oriented retail and commercial uses to thrive within a busy auto environment, and can be a gracious component of an elegant shopping street. On the busy O Street corridor, the parallel access street would:

- Provide a layered physical separation of parking and landscaping.
- Reduce traffic speeds adjacent to pedestrian zones.
- Allow flexibility in use of the pedestrian and parking zone for cafes, displays, public art or additional landscaping.
- Provide a more comfortable and intimate pedestrian experience in contrast to the excessively wide existing sidewalks.



Example of Parallel Access Road, Paris, France

O Street Parallel Access Streets

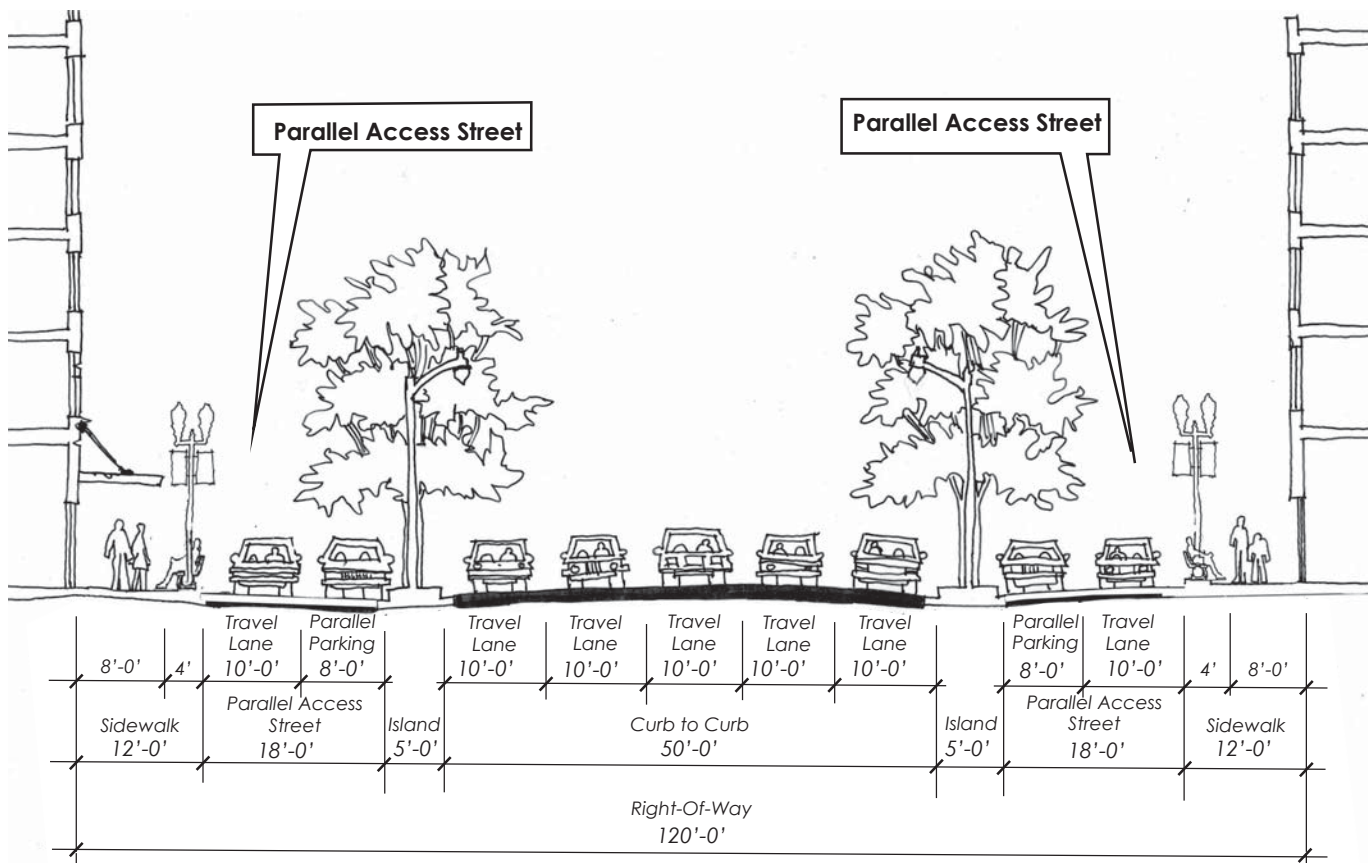
The O Street pedestrian environment would be greatly improved by reconfiguring the existing roadway to include narrow, slower-traffic access lanes on either side of the blocks from Centennial Mall to 10th Street.

Because they are in the existing 120' right-of-way, these new travel lanes are not considered "new streets" per se, but rather a redesign of the existing O Street roadway. The lanes would:

- Add a single 10'-wide, one-way auto traffic lane on both north and south sides of O (providing a total of seven travel lanes versus five existing).
- Maintain a single 8' parking lane on both sides of O.
- Provide a curb-to-curb distance of 50' (versus 66' existing).
- Allow access and egress a minimum of 30' from existing intersections, with right-in, right-out turning movements only.



Existing O Street Arterial



Proposed O Street Section

“Lincoln Crossing”

Grade-Separations

Removing the heavy regional through-traffic of 9th and 10th Streets from P Street, with the grade-separated roadways, would allow a pedestrian-friendly, rather than an auto-dominated environment on the primary retail street, which links the historic Haymarket District with the downtown retail core.

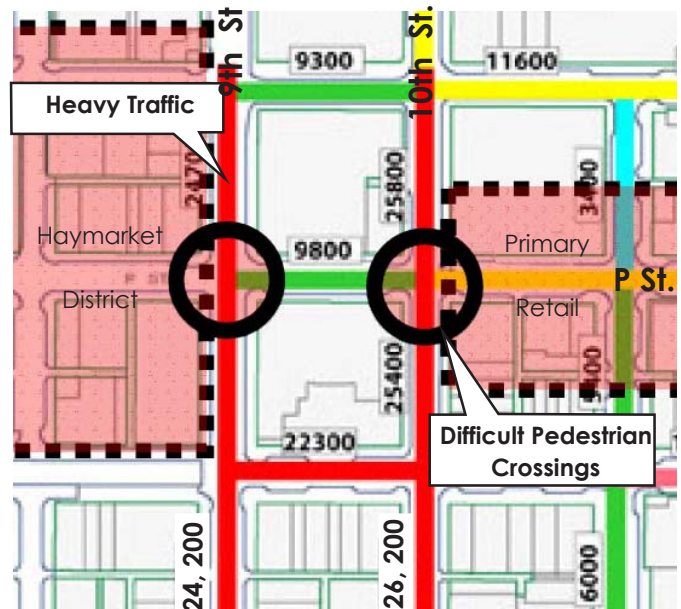
Existing Conditions:

- 50,000 daily trips (combined) on couplet.
- Wide curb-to-curb crossing for pedestrians.
- No pedestrian refuges (curb-extensions or medians) on 9th and 10th Streets.
- Inactive ground-floor building facades.

Proposed Concept

Both 9th and 10th Streets would be lowered below P Street to achieve a number of benefits including:

- **Knitting together districts** – the historic Haymarket District and the P Street retail corridor would be given a pedestrian- and shopper-friendly link.
- **Accommodating local access** – parallel access streets for local pedestrian and auto access from 9th and 10th streets to P Street would be provided, allowing 9th and 10th street motorists full access to the P Street corridor.
- **Facilitating anchor retail development** – Anchor retail envisioned for the Greyhound and Journal Star sites would be provided with direct, safe and convenient access to the P Street primary retail blocks.



Busy 9th and 10th Street Arterials

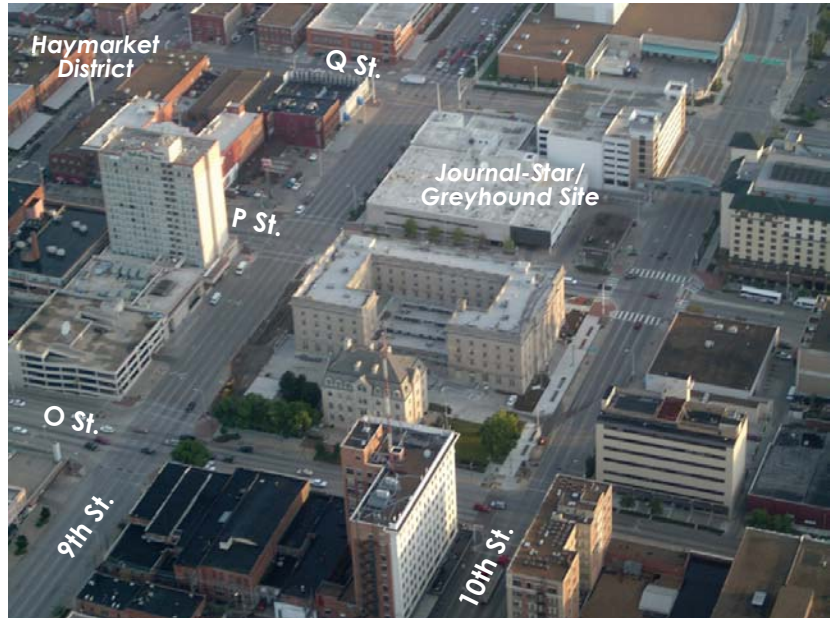


Grade Separated Street Plan

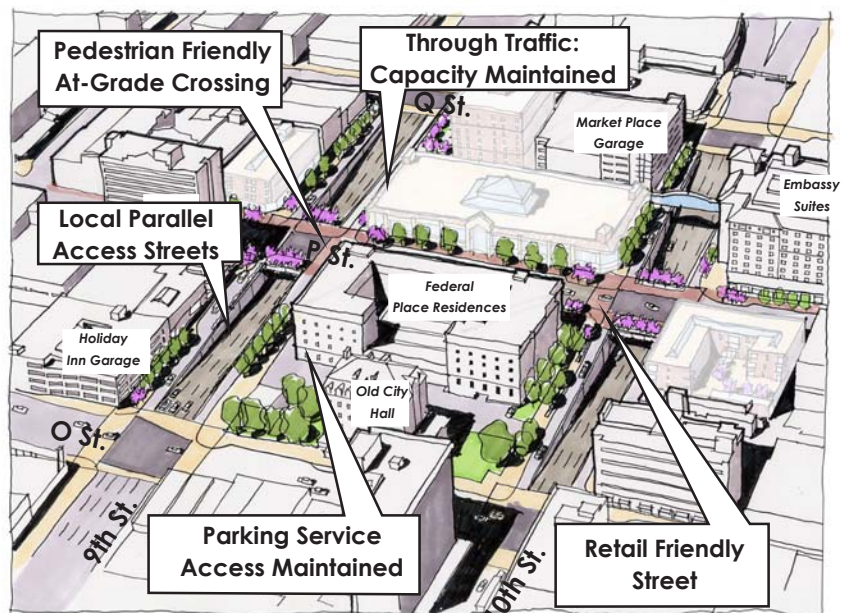
Planned Improvements

The grade-separated roadway design should:

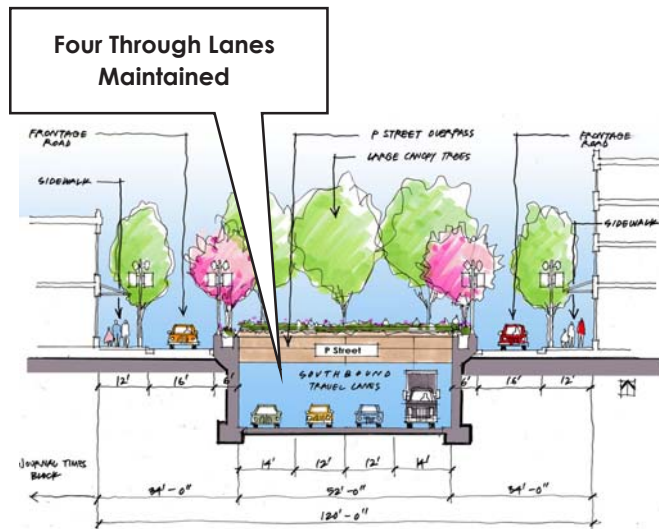
- Allow for parking structure access at the anchor development site.
- Meet all highway design requirements for underpass height and roadway grades.
- Maintain existing through and turn lane capacity.
- Include local street access to P Street.
- Allow a portion of P Street to be converted to two-way.



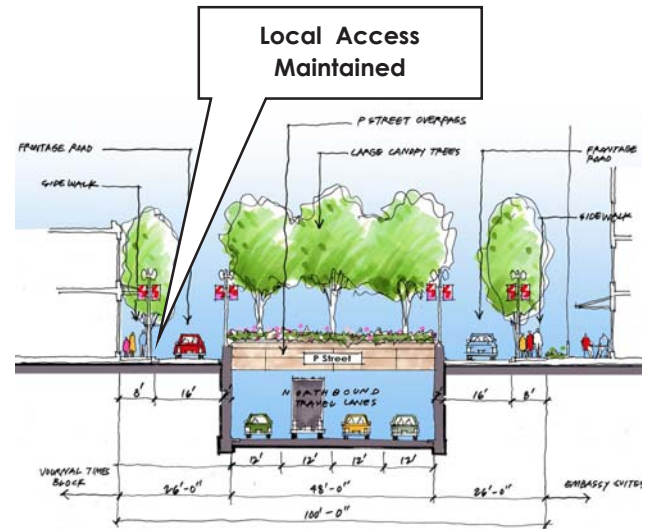
Existing 9th/10th Street Couplet



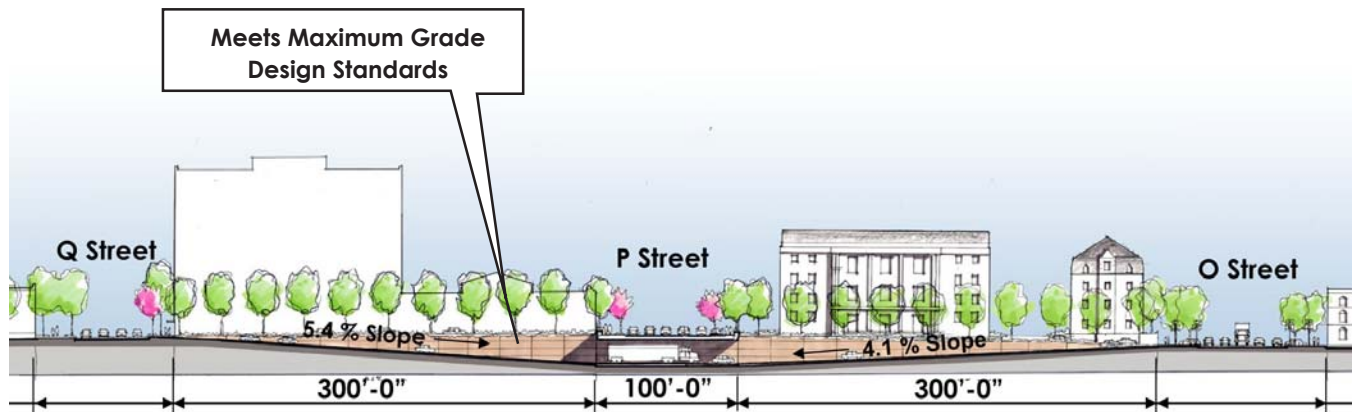
Proposed Lincoln Crossing at 9th/10th Street



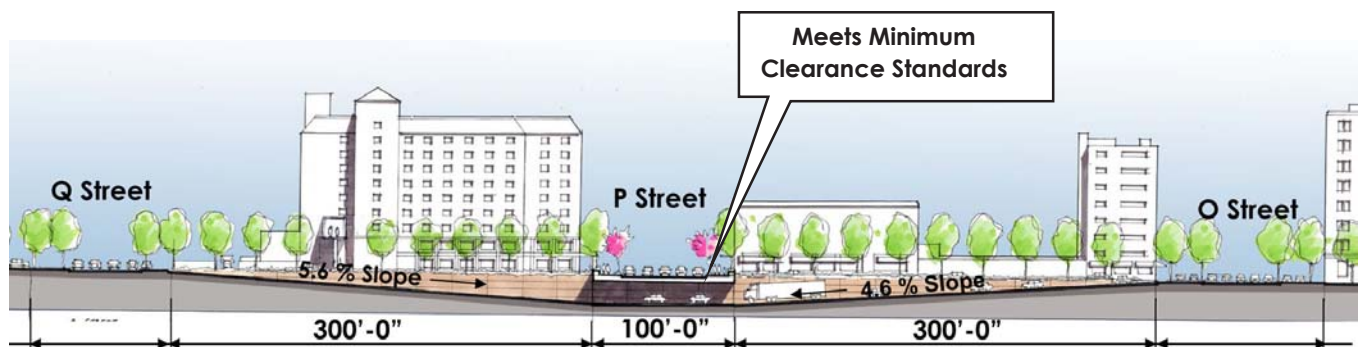
Proposed 9th Street Section



Proposed 10th Street Section



Proposed P Street at 9th Street - Grade Separated Section



Proposed P Street at 10th Street - Grade Separated Section